

REMARKS

This Amendment is filed responsive to an Office Action mailed June 14, 2001 with a shortened three-month response date.

By this Amendment, claims 1-33, 35-53 and 55-75 are pending. Claims 1-5, 7-10, 12, 13, 15-24, 26, 32-36, 39-58, 60-65 and 71-75 are allowed. Claims 6, 11, 14, 25, 27-31, 37, 38, 59 and 66-70 are rejected because of informalities, which would be allowable upon clarifying for the record. The drawings are objected to, and correction is required.

By this Amendment, claims 6, 11, 14, 23, 25, 27, 29, 30, 37, 38, 59, 66, 67, 69 and 70 are amended. Furthermore, by this Amendment and a concurrent letter to the Official Draftsman (as to the Figures), Figure 5A is amended, and Figures 5C-5H (and the descriptions thereof) are added consistent with the specification as filed. No new matter is added.

Applicant wishes to call the Examiner's attention to the attached document entitled, "Amendment B--Changes Marked to Claims as Originally Filed," wherein all changes have been either stricken (removed verbiage) or underlined (added verbiage) as relate to the amendment of the originally filed patent application.

The drawings are objected to as failing to comply with 37 CFR 1.84(p)(4) because reference character "380" has been used to designate both scanner (37:22) and interface (37:25). By this amendment, the specification has been amended, and the drawing of FIG. 5A has been corrected to recite the interface (37:25) and 390. Correction has been made, and the objection to the drawings under 37 CFR 1.84(p)(4) has been overcome and traversed.

The Examiner objected to the drawings under 37 CFR 1.83(a), stating that "the drawings must show every feature of the invention specified in the claims." The Examiner states that "The claimed functional steps (claims 21-25, 34-37, 44-47, 50-53, 55-56, 61-71 and 75). The drawings show claimed structure, but there is a lack of illustration in the drawings for the claimed functionality. This is neither a written description nor an enablement issue, but rather, it pertains to a rule for illustrating to the public the claimed invention."

By this Amendment, certain ones of the drawings (Figure 5A) and respective portions of the specification have been amended and Figs. 5C-5H have been added (and respective portions of the specification have been amended) to further illustrate the claimed functionality responsive to the Examiner's objection. No new matter has been added.

While being responsive to the Examiner's objections, it is respectfully submitted that the drawings as originally filed show the features of the invention specified in the claims. Figures 3, 4, 6, and 10, and the description thereof within the specification (e.g., see page 16, lines 19-24, page 24, lines 22-23 and page 39, lines 9-17) provide both support in the drawings and the specification for the mapping of poses...emotional functions, as in, inter alia, claim 31 and claims 40-41, 44-45, and 48-50. Additionally, support for claims 40-41, 44-45, and 48-50 are provided in Figures 4C and 4D and the description thereof in the specification. Furthermore, Figures 1A and Tables I, II, and III and the description thereof in the specification, provide illustration in the drawing and related description, of the features of the invention specified in the claims 31, 44, 45 and 50 for which the drawings are objected to.

Figure 3 of the present application details the mapping of game display functions to the image data packets. Furthermore, Tables I, II, and III, in conjunction with the Figures 1A and 1B, provide additional structure in the drawings to show the features of the invention specified in the claims. The mapping of poses, as in claim 31, is additionally detailed in Figure 6, and the description thereof (see elements 1060, 1070, and 1080 of Figure 6). For example, at page 39, line 9, discussing step 1060, the specification states that "a decision is made to select poses." If yes, (step 1080)..."poses are selected, mapping data and formatting is generated."

It is respectfully submitted that all bases of objection of the drawings under 37 CFR 1.83(a), as to claims 21-25, 34-37, 44-47, 50-53, 55, 56, 61-71 and 75, have been overcome and traversed for the reasons as discussed above. No new matter has been entered.

Claims 6, 11, 14, 25, 27-31, 37, 38, 59 and 66-70 are objected to because of informalities. It is respectfully submitted that "mapping signals" are distinct from, and not redundant for, "integration control signals" as in claim 14 (amended). It is further respectfully submitted that a

"semiconductor device" is patentably distinct from, and not redundant for, "magnetic storage device." For support in the treatises, see for example, "Electronic Engineers Handbook," ©1975, 1st Edition, pp. 6-11, Section 6, "Properties of Materials," semiconductor is listed separately from magnetic; Section 23, "Electronic Data Processing," "Storage Methods, Devices, Circuits," semiconductor memories (pg. 55) are separately listed from Magnetic Storage (pp. 58-63). Copies of title pages and cited pages are attached herewith as a courtesy.

By this Amendment, Claims 6, 11, 14, 23, 25, 27, 29, 30, 37, 38, 59, 66, 67, 69 and 70 have been amended to overcome all bases of objection as set forth in paragraph 8 of Paper No. 15, Office Action dated June 14, 2001.

All bases of objection have been responded to and overcome by this Amendment, and the concurrent submission of revised drawings, a courtesy copy of which is enclosed herewith for the Examiner. It is respectfully submitted that the application is in proper form for allowance of all claims.

Early and favorable consideration of the amended application is respectfully requested, taking the form of allowance of all pending claims as amended.

Applicant's attorney thanks the Examiner for his time and courtesy in providing two telephone interviews and in providing an Examiner's Amendment and Summary thereof. As one addition to the Examiner's Summary dated June 7, 2001, Applicant wishes to note that claims 67 and 69, as amended, are consistent, and further note these claims cover any structure for providing the respective display presentation, and that the claim amendment, have been made to clarify this and responsive to the Examiner's objections.

A copy of the International Search Report has been previously faxed to the Examiner. However, enclosed herewith is a hard copy of said Report.

The Examiner is invited to communicate directly with the undersigned via phone as would be of assistance to expediting prosecution of this matter.

Respectfully submitted,



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September 13, 2001

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IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

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)
For: User Image Integration and)
Tracking for an Audiovisual)
System and Methodology)
)
Serial Number: 09/184,600)
)
Filed: November 2, 1998)
)
Examiner: M. Sager)
)
Art Unit: 3713)
)
Attorney Docket: STD 1716)

AMENDMENT B--CHANGES MARKED TO CLAIMS AS ORIGINALLY FILED

6. (Amended) The system as in claim 5, wherein the storage medium is comprised of at least one of a videotape, a floppy disk, a compact disk, a digital video disk, ~~other magnetic storage, other digital storage,~~ a photographic print, and a computer image printout.

11. (Amended) The system as in claim 1, wherein at least one of the source of the first video image signal and the source of the user image signal is comprised of at least one of an interface with a modem, a CD-ROM, a DVD cartridge, a floppy disk, a smart card, magnetic storage, optical storage, and semiconductor storage.

14. (Amended) The system as in claim 13, wherein the external image signal is at least one of an analog signal, a digital signal, a broadcast video signal, signal parameter data, video image data, digital audio data, and integration control signals, ~~and mapping signals.~~

23. (Twice Amended) The method as in claim 21, wherein the tracking ~~data is~~ signals are comprised of at least one of manually generated tracking data, automatically generated tracking data, and motion-capture data, ~~wherein said tracking data is derived from the video signals and is representative of~~ at least one of a plurality of defined actor positions. ~~of the recognizable video~~

~~presentation of the respective selected character functions within each of the respective background images.~~

25. (Amended) The method as in claim 24, wherein the ancillary data is comprised of at least one of a ~~background scene, a sequence of background scenes forming one of a~~ video and an audiovisual presentation, hairstyle, facial hair, removal of hair, clothing, hair accessories, clothing accessories, hair color, facial cosmetic makeup, weapons, glasses, and tools. ~~other props.~~

27. (Amended) The system as in claim 26, wherein the visual display presentation is representative of the image of a person, and wherein the ancillary attributes are further comprised of at least one of colors, lighting, clothing, ~~other attire~~, hairstyle, ~~hair color~~, removal of specified hair, addition of hair to a specified area of the image of a person, hair accessories, non-jewelry clothing accessories, ~~facial accessories~~, jewelry, glasses, applied cosmetics, tools, and weapons.

29. (Twice Amended) A system for user creation and storage of user image signals, comprising:

apparatus for generating user image signals for a plurality of poses of a same user's user image;

storage apparatus; and

apparatus for formatting the user image signals and storing the formatted user image signals as digital data in the storage apparatus;

apparatus providing display signals for a display presentation comprising a plurality of background images representative of a plurality of background images of which at least two of which are comprised of a recognizable video presentation within the background images, associated with a common character function, wherein recognizable video presentation of the respective selected character function has respective position within the respective ones of the background images and respective predefined character function pose characteristics uniquely associated with the respective ones of the background images;

wherein the recognizable video presentation is comprised of a plurality of poses
utilized in respective ones of a plurality of the background images;
means for selecting one of the character functions;
apparatus for mapping the user image signals for different ones of the poses
therefor with each of the respective poses for the recognizable video presentation of the
respective selected character functions within the respective background images of the
video presentation, responsive to the respective position and the respective pose
characteristic.

30. (Amended) The system as in claim 29, wherein the plurality of poses are at least one of front facial view, side facial view, top facial view, ~~smiling, frowning, happy, sad, upset, angry, shy, frustrated, other~~ facial expressions, sitting, standing, kneeling, jumping, and lying down.

37. (Twice Amended) The method as in claim 34, wherein the customized image is at least one of a video image, an audio sequence, and an audiovisual image, ~~and a movie~~.

38. (Amended) The system as in claim 1, wherein the background image is further comprised of at least a portion of a person;

wherein the user image is representative of at least one of facial expression features, ~~predefined image data~~, voice data, arrangement of hair, ~~style, mustache, beard, hair~~ addition of hair to a selected part of the portion of the person, color of hair, hair accessories, hair removal of hair from a selected part of the portion of the person, tools, instruments, clothing, accessories, and facial cosmetic makeup.

59. (Twice Amended) The system as in claim 58, wherein the display presentation is provided for at least one of ~~a video display, an audiovisual display~~, a movie, a television broadcast display, a computer generated display, and a video game display.

66. (Twice Amended) The stored audiovisual presentation as in claim 65, wherein the non-volatile form is one of ~~video tape~~, semiconductor storage memory, ~~a computer disk, a compact disk (CD)~~, optical storage, and magnetic storage, ~~and data for computer stored on any medium~~.

67. (Twice Amended) A method of providing a display presentation, the method comprising:
providing an audiovisual display presentation responsive to stored audiovisual
content produced by the process of:

providing user data;

providing a predefined source, wherein the source comprises audiovisual
program content representative of a plurality of background images of which at
least two of which are comprised of a common character function therewithin
having a recognizable video presentation within respective ones of the
background images; and, ~~other~~ program data;

selecting a portion of the audiovisual program content for the recognizable
video presentation of a selected character function responsive to the ~~other~~
program data, as a selected portion for user data associative integration;

integrating the user data with the selected portion responsive to the ~~other~~
program data;

providing a modified output content in an audiovisual format responsive to
the integrating wherein the user data is associated into the selected portion of the
audiovisual program content.

69. (Twice Amended) The method as in claim 67, wherein the step of providing an
audiovisual display presentation is one of provides for at least one of a video display, an
audiovisual display, a projected movie display, a broadcast television display, a computer
generated display, and a video game generated display.

70. (Twice Amended) The method as in claim 67, wherein the step of storing the modified
output content uses at least one of a ~~video tape, a~~ magnetic storage, semiconductor storage,
~~memory, a computer disk, a compact disc (CD), a digital versatile disc (DVD),~~ and optical
storage disc.

ELECTRONICS ENGINEERS' HANDBOOK

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Contributors
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time-varying phe-
energy, acoustic a
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theorems

Section 4. Infor

Concepts, source
channel, noise a

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SECTION 6

PROPERTIES OF MATERIALS

BY

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1. Volume electrical cur

where $\sigma = v_0$
(A/m²), and
of current der
The volun

where $G = c$
section (m²).

2. Mass C

where $\sigma_m = n$
and $m = \text{con}$

3. Volume current densit

where $\rho = \text{re}$
(V/m). The
between the v

where $R = \text{re}$
Table 6-1 lists
resistivity of a

4. Mass R

where $\delta = \text{ma}$
(m).

5. Internal copper at 20°C
resistivity of a
10⁻⁸ $\Omega \cdot \text{m}$.

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SECTION 23

ELECTRONIC DATA PROCESSING

BY

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In Fig. 23-69b each storage cell contains a two-way AND, e.g., as in magnetic cores. In this system each of two lines is energized to select one core, and instead of m interrogation lines, $2m^{1/2}$ lines are used in the selection scheme. In Fig. 23-69c, each storage cell is associated with a three-way AND. The interrogation lines required are $3m^{1/2}$. In the final case (Fig. 23-69d), a six-way AND is used with each storage cell and only $6m^{1/2}$, or 12, interrogation lines are required. In the latter case, the number of drive lines is minimized, and no decoding function is required externally to the storage system.

57. Semiconductor Memories. Figure 23-70 shows a basic circuit for realization of a storage function using a bipolar transistor circuit. The select line performs the function of selection, and if selected, the sense and write lines can be used for the read or write function. This bipolar transistor store is NDRO, volatile, and random access.

Figure 23-71 shows a static storage cell that uses FET devices. Selection is accomplished through x and y lines that open gates to the sense and reset lines. The system is NDRO, volatile, and random access.

Bipolar circuits in a storage system are generally faster, more wasteful of power, and more expensive than FET devices. The difference in cost arises primarily because bipolar devices require more complex processing steps in manufacture.

58. Thin-Film Magnetic Storage. Figure 23-72 shows a thin magnetic film, such as Permalloy, with two labeled hysteresis loops. An isotropy is present in the film if it is plated or evaporated on a support in the presence of an external magnetic field. This isotropy defines an easy and hard axis of magnetization. If the shape of the film is long and thin (to prevent pole demagnetization), the magnetization will lie along the easy axis in either of two directions and a single domain will be found in the film. In the easy-axis direction the hysteresis loop of the film tends to be square (Fig. 23-72b); in the hard-axis direction the loop is nearly linear. The square hysteresis loop in the easy-axis direction permits nonvolatile binary storage.

Figure 23-73 shows operation of a storage array using Permalloy plated on conductive wires. The easy axis is in the direction of the wires, and information is stored at the intersections of a wire with each sense line. The information state is determined by the direction of the magnetization at each intersection. Current in the wire rotates the

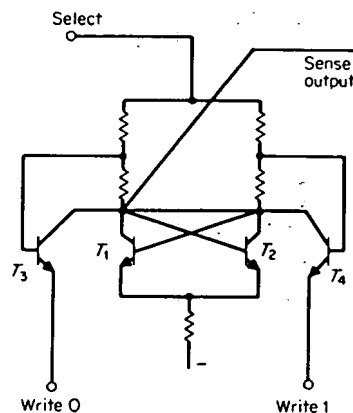


Fig. 23-70. A bipolar transistor storage cell. Storage is accomplished by means of a cross-coupled transistor flip-flop. The normal state of the select line is such that the output is below detection levels in either state of the flip-flop. When the cell is selected, the sense output becomes sufficiently positive for detection if T1 is off. Similarly the select line needs to be positive while writing; otherwise T3 and T4 remain off.

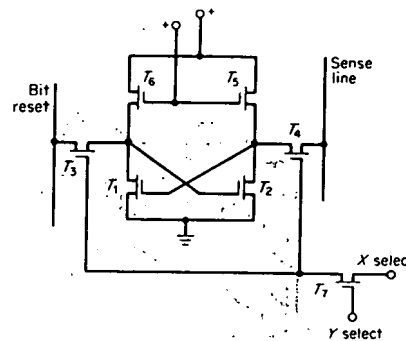


Fig. 23-71. An FET storage cell. T_5 and T_6 are FETs used as load resistors while T_7 is a two-way AND circuit that connects the cell to the bit and sense lines when selection occurs. T_1 and T_2 form a cross-coupled flip-flop. The state when T_2 is on represents a 1. The sense line is used for set and the bit reset line for reset.

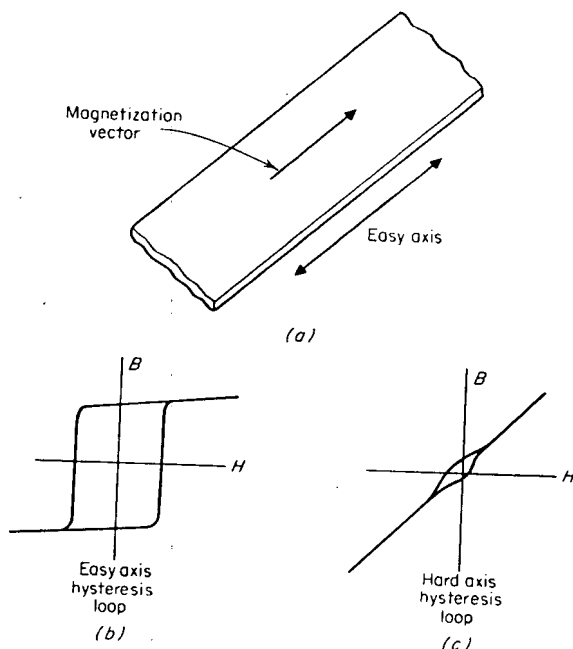


Fig. 23-72. Magnetic storage properties of a ferromagnetic film. When a magnetic film (a), such as Permalloy, is deposited in the presence of a magnetic field, the film develops a preferred (easy) axis of magnetization. If the film is thin and long in the easy-axis direction, the magnetization of the material along the easy axis can occur in either of two directions, with a square hysteresis loop (b). The loop (c) in the hard direction is not square.

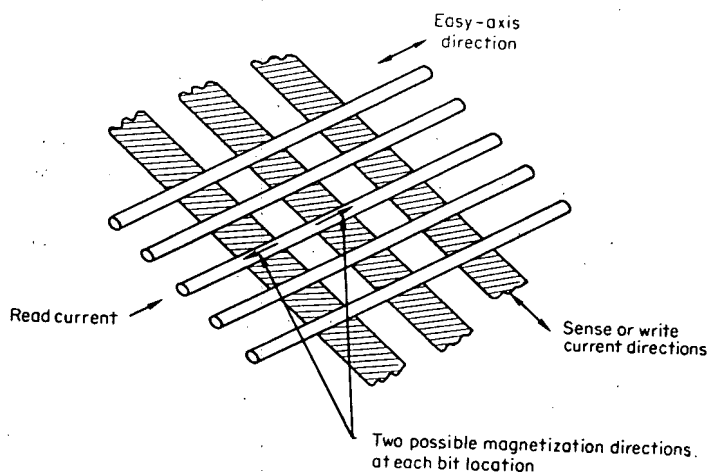


Fig. 23-73. Storage system using wires plated with magnetic material. The easy axis is in the direction of the wires, so that the film magnetization at each bit location is either parallel or antiparallel to the read-current direction. When a read current is applied, the magnetization is rotated into the hard-axis direction, causing coupling to the sense lines. The signal on the sense line is either positive- or negative-going, depending upon the prior direction of the magnetization vector.